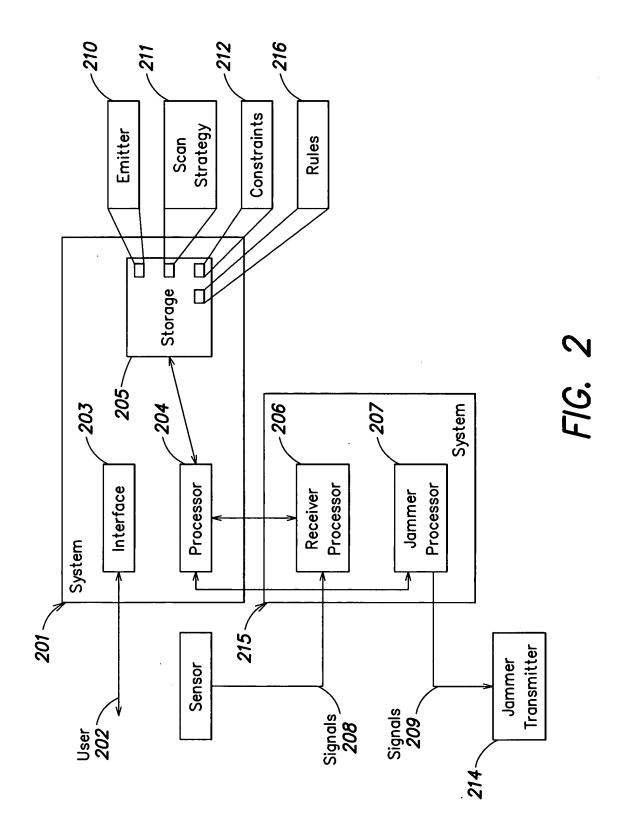


Docket No.: L0562.70037US00



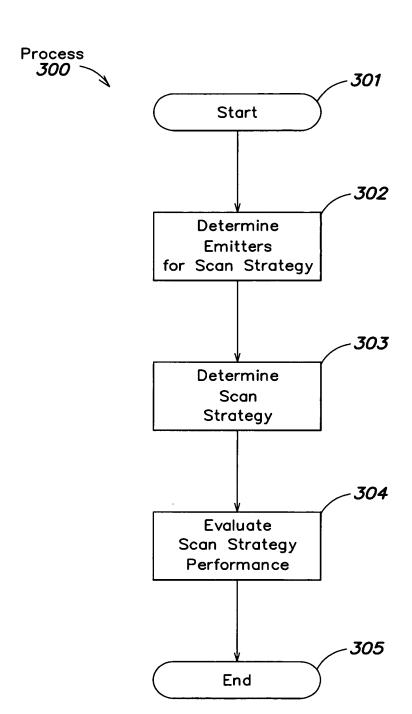


FIG. 3

| 1 |                  |                      | Emitter<br>Database<br><b>401</b><br>Parameters | Emitte<br>Entry<br><b>403</b> | / |
|---|------------------|----------------------|---|-------------------------------|---|
| • | Emitter<br>Model | Dwell<br>Solution(s) | Constraints                                     | Rules                         |   |
|   |                  |                      | •   |                               |   |
| N |                  |                      |   |                               |   |

FIG. 4

GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

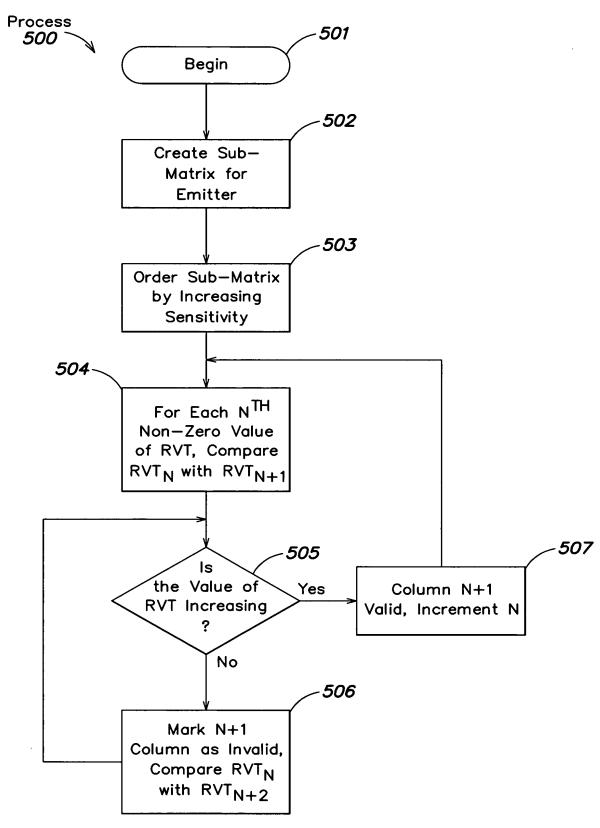
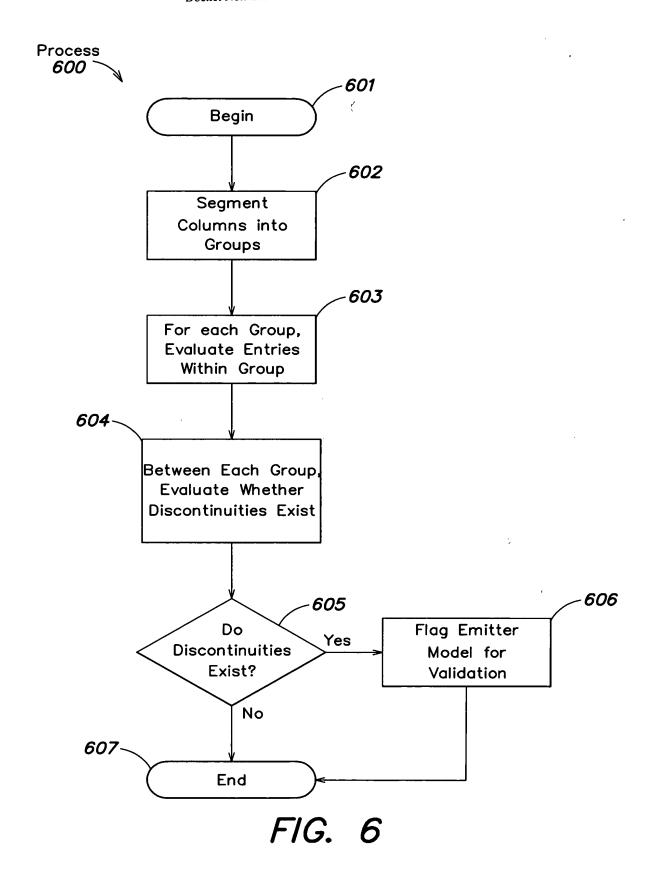


FIG. 5

GOUNALIS, Anthony J. Serial No.: 10/675,644

Docket No.: L0562.70037US00



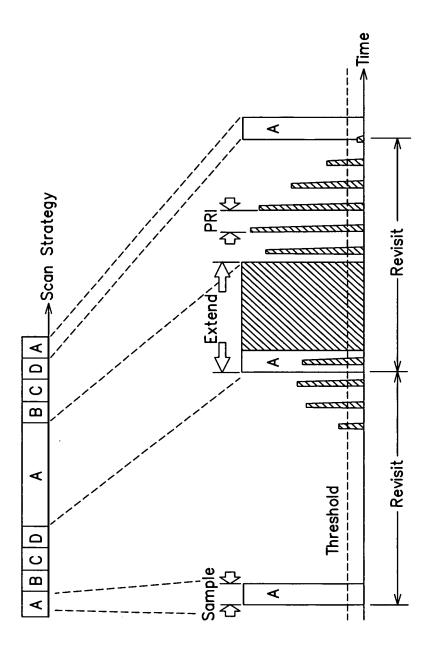
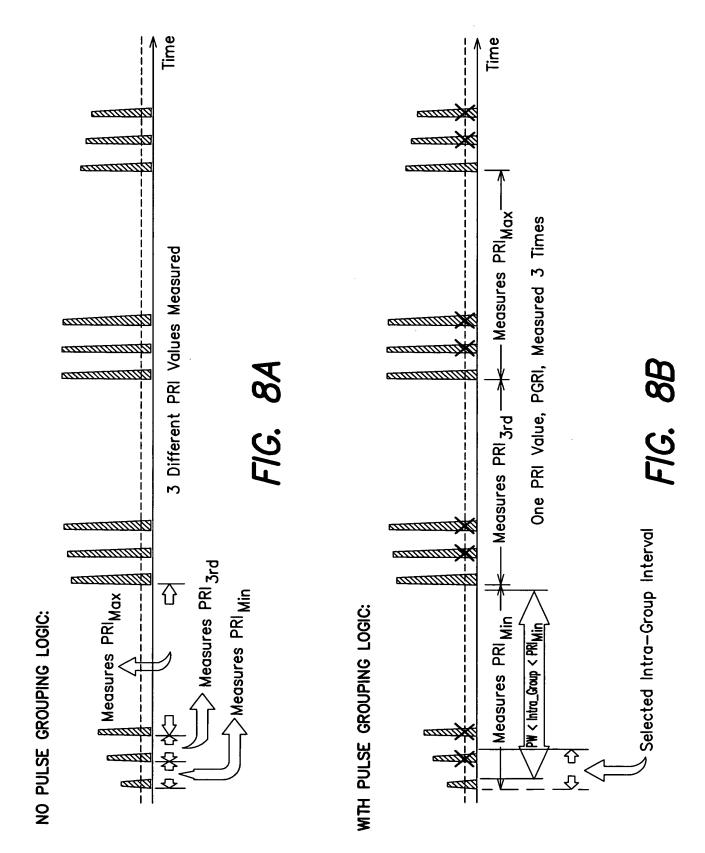
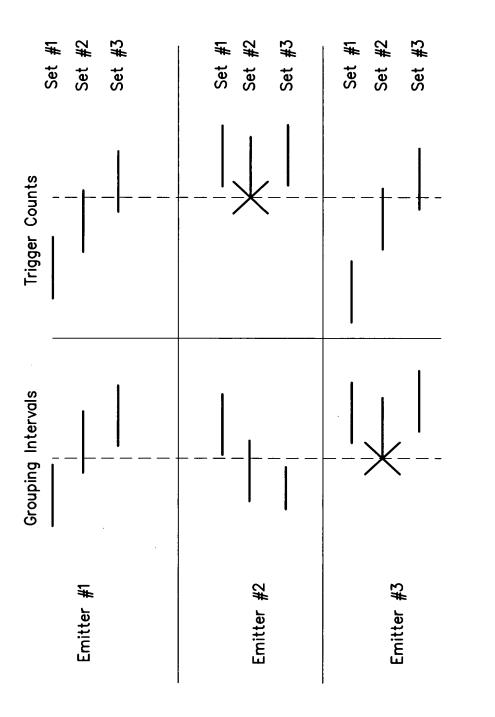
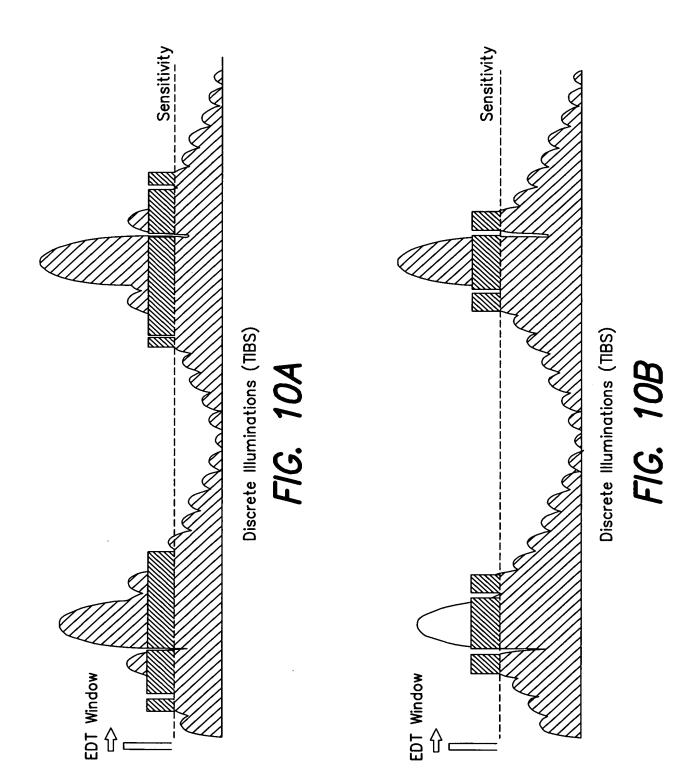


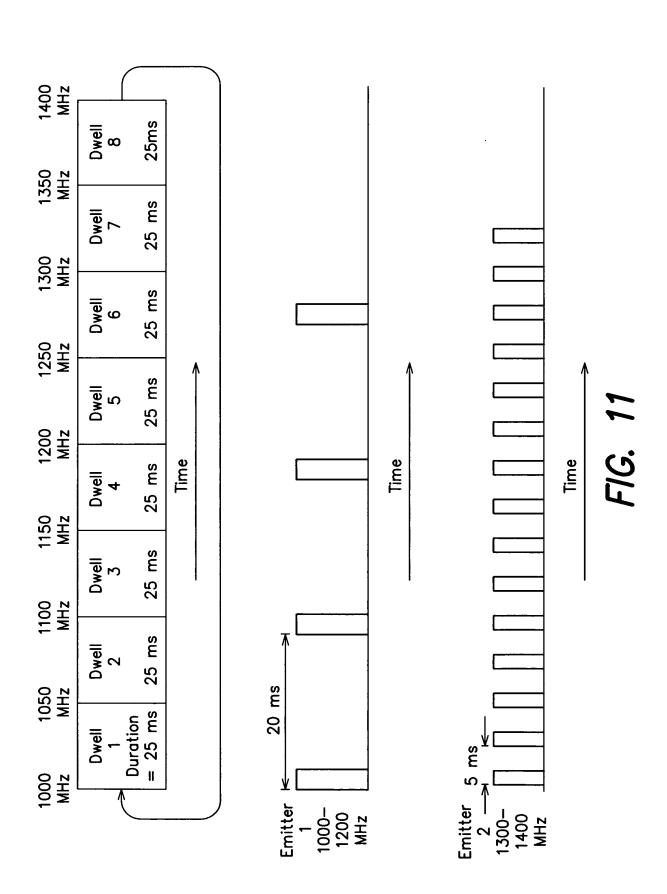
FIG. 7



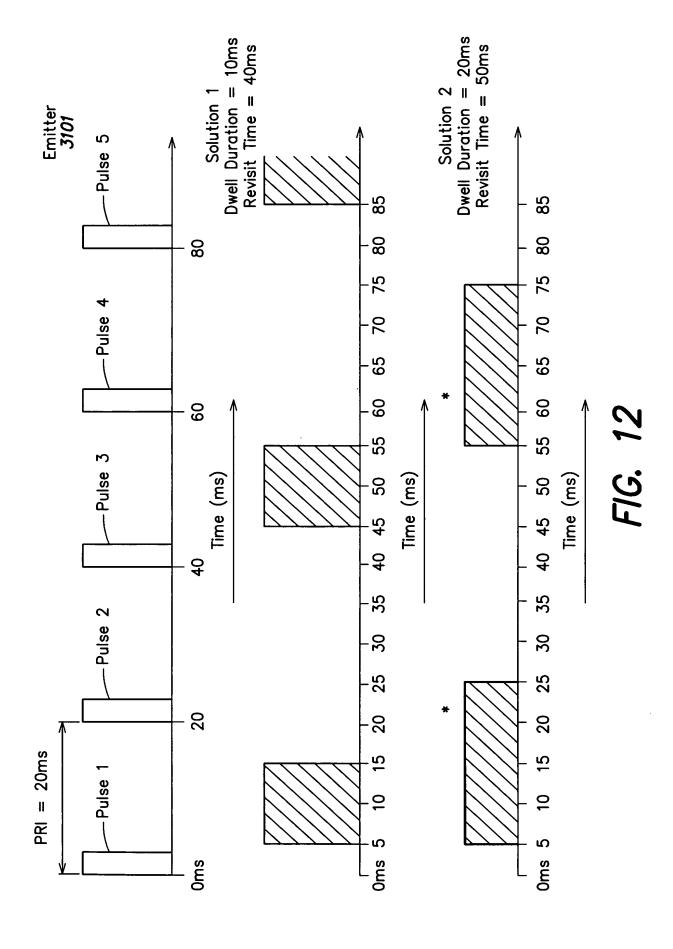
Emitter Signals GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00







GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00



|  |        |        | _      |        |
|--|--------|--------|--------|--------|
| Min<br>MDT<br>(ms)                                   | 3      | 5      | 2      | 4      |
| RF Max<br>(MHz)                                      | 1300   | 1350   | 1810   | 1860   |
| RF Min<br>(MHz)                                      | 1000   | 1220   | 1510   | 1730   |
| Detecting Method 2<br>30MHz IF/<br>15MHz VBW<br>RVT  | 650 ms | 780 ms | 330 ms | 390 ms |
| Detecting Method 1<br>250MHz IF/<br>15MHz VBW<br>RVT | 100 ms | 120 ms | 110 ms | 130 ms |
| Emitter<br>Name                                      | E1     | E2     | E3     | E4     |

Emitter Signals GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

|      |         | 100            | Lonnios           |                    |
|------|---------|----------------|-------------------|--------------------|
| 1250 | Dwell 1 | $DD_{Max} = 5$ | $RVT_{Min} = 100$ | Cost = 5/100 = .05 |

| 0         |                                 | Solution 2  |                    | Total | ۲)   |
|-----------|---------------------------------|-------------|--------------------|-------|--|
| .0 1270   | Dwell 9                         | DD Max<br>5 | RVTMin             | 650   | Cost = 5/650   |
| 1210 1240 | Dwell 6 Dwell 7 Dwell 8 Dwell 9 | DD Мах<br>5 | RVTMin             | 650   | Cost + Cost 3/650 3/650 3/650 5/650 5/650 |
|           | Dwell 7                         | DD Max      | RVTMin             | 650   | + Cost<br>3/650  |
| 50 1180   | Dwell 6                         | DD Max      | RVTMin             | 650   | + Cost 3/650   |
| 1120 1150 | Dwell 5                         | DD Max      | RVTMin             | 650   | + Cost<br>3/650  |
|           | Dwell 4                         | DD Max      | RVTMin             | 650   | + Cost -3/650  |
| 60 1090   | Dwell 3                         | DD Max      | RVTMin             | 650   | + Cost - 3/650   |
| 30 1060   | Dwell 1 Dwell 2 Dwell 3 Dwell   | DD Max      | RVT <sub>Min</sub> | 650   | Cost -   |
| 00 1030   | Dwell 1                         | DD Max      | RVTMin             | 650   | Cost 3/650   |

FIG. 14A

|      |         | 1010              | Lonnioc                      |                                    |           |         | Solution 2        |                              | $22/330 = .0\overline{6}$                            |
|------|---------|-------------------|------------------------------|------------------------------------|-----------|---------|-------------------|------------------------------|--|
| 1760 |         |                   |                              | 1                                  | 1780      | Dwell 9 | DD Max            | RVT <sub>Min</sub><br>330 ms | Cost = 4/330   |
| τ-   |         |                   |                              |                                    | 1720 1750 | Dwell 8 | DD Max            | RVTMin<br>330 ms             | + Cost + Cost + Cost + Cost 2/330 2/330 4/330 4/330  |
|      |         |                   |                              |                                    | 1690 172  | Dwell 7 | DD <sub>Max</sub> | RVT <sub>Min</sub><br>330 ms | + Cost +<br>2/330                                    |
|      |         | sı                | SE                           | = .012                             | 1660 16   | Dwell 6 | DD Max            | RVT <sub>Min</sub><br>330 ms | + Cost - 2/330                                       |
|      | Dwell 1 | $DD_{Max} = 4 ms$ | $RVT_{Min} = 330 \text{ ms}$ | $\cos t = 4/330 = .01\overline{2}$ | 1630 16   | Dwell 5 | DD <sub>Max</sub> | RVT <sub>Min</sub><br>330 ms | + Cost - 2/330                                       |
|      | Q       | MOO               | RVT                          | Cost =                             | 1600 16   | Dwell 4 | DD Max            | RVTMin<br>330 ms             | + Cost<br>2/330                                      |
|      |         |                   |                              |                                    | 1570 16   | Dwell 3 | DD Max            | RVT <sub>Min</sub><br>330 ms | Cost - 2/330   |
|      |         |                   |                              |                                    | 1540 15   | Dwell 2 | DD Max            | RVT <sub>Min</sub><br>330 ms | Cost + Cost + Cost + Cost<br>2/330 2/330 2/330 2/330 |
| 1510 |         |                   |                              |                                    | 1510 15   | Dwell 1 | DD Max            | RVTMin<br>330 ms             | Cost - 2/330   |
|      |         |                   |                              |                                    | 15        |         |                   |                              |  |

FIG. 14B

Serial No.: 10/675,644 Docket No.: L0562.70037US00

GOUNALIS, Anthony J.

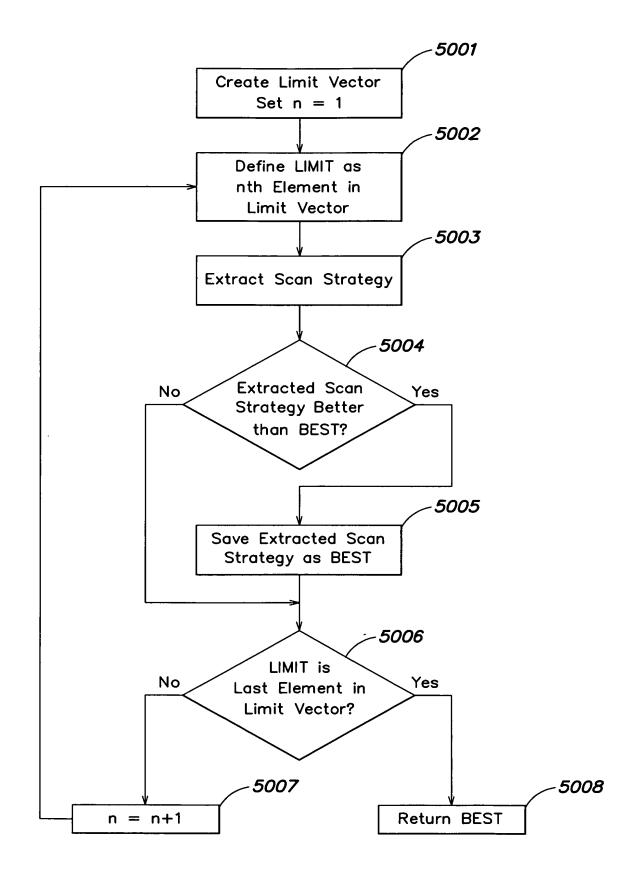


FIG. 15

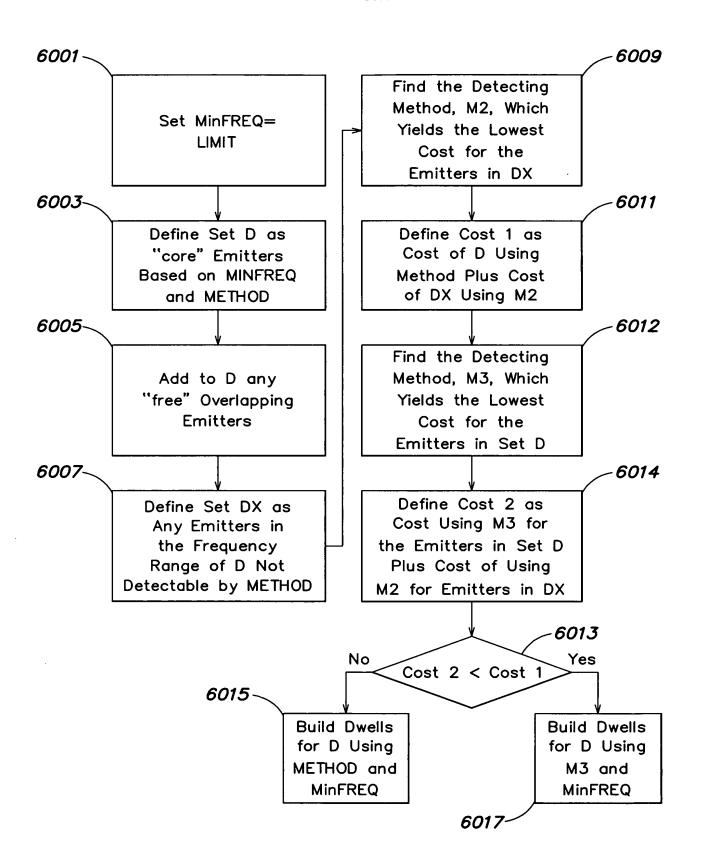


FIG. 16

| Name | RF Min | RF Max |
|------|--------|--------|
| E1   | 1100   | 1200   |
| E2   | 1150   | 1250   |

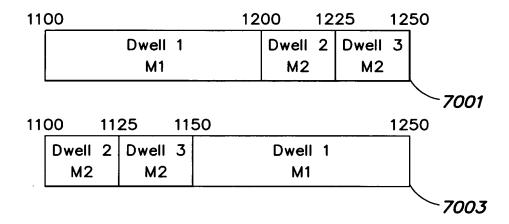


FIG. 17

GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

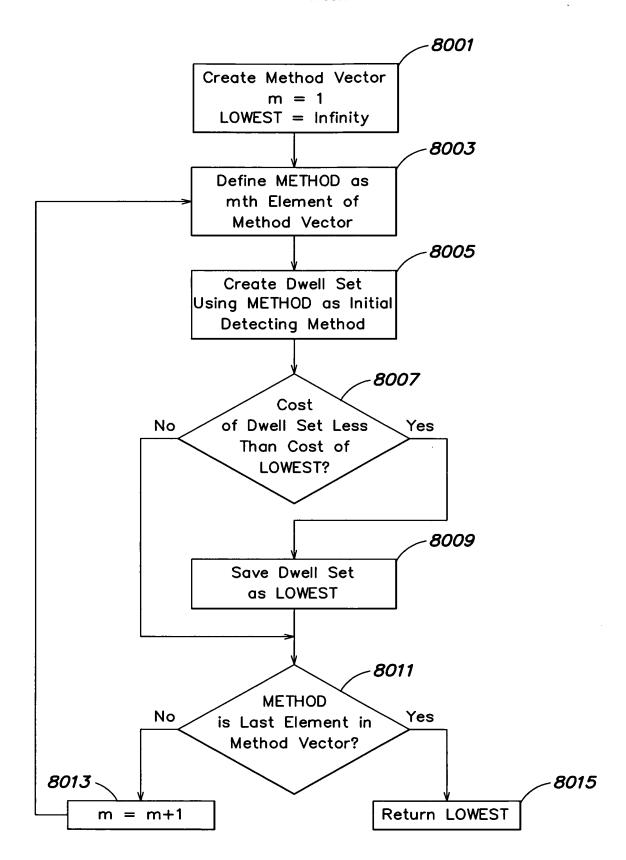


FIG. 18

Serial No.: 10/675,644 Docket No.: L0562.70037US00

| Emitter   | Dwell Duration (ms) | Revisit Time (ms) |
|-----------|---------------------|-------------------|
| Emitter 1 | 1                   | 500               |
| Emitter 2 | 2                   | 1200              |

## FIG. 19

| Emitter   | Dwell Duration (ms) | Revisit Time (ms) | Cost |
|-----------|---------------------|-------------------|------|
| Emitter 1 | 1                   | 500               | .002 |
| Emitter 2 | 5                   | 1000              | .005 |

FIG. 20

| Dwell 1     | Dwell 1<br>Dwell 2 | Dwell 1 Dwell 1 Dwell 1<br>Dwell 2 |      | Dwell 1 | Dwell 1<br>Dwell 2 | Dwell 1 | Dwell 1 Dwell 2 Dwell 2 Dwell 2 Dwell 2 | Dwell 1 | Dwell 1<br>Dwell 2 | Dwell 1 | Dwell 1<br>Dwell 2 |
|-------------|--------------------|------------------------------------|------|---------|--------------------|---------|---|---------|--------------------|---------|--------------------|
| <del></del> | -                  |                                    |      |         |                    |         |   |         |                    |         |                    |
| 200         | 1000               | 1500                               | 2000 | 2500    | 3000               | 3500    | 4000  | 4500    | 2000               | 5500    | 0009               |
|             |                    |                                    |      |         | Time (ms)          | ms)     | /   |         |                    |         |                    |
|             |                    |                                    |      |         |                    |         | ١   |         |                    |         |                    |
|             |                    |                                    |      |         |                    |         |   |         |                    |         |                    |
|             |                    |                                    |      | F       | FIG. 21            | 7       |   |         |                    |         |                    |

GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

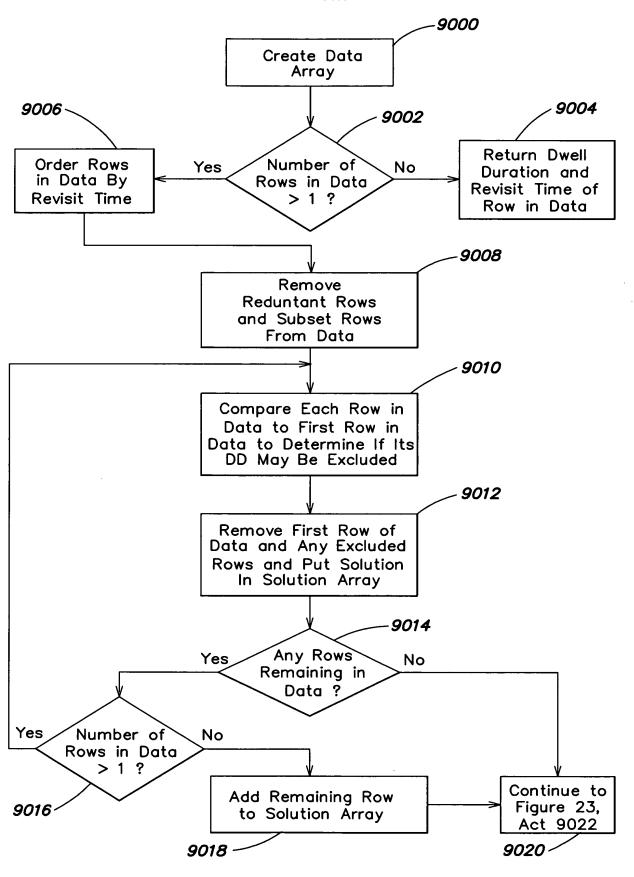


FIG. 22

GOUNALIS, Anthony J.

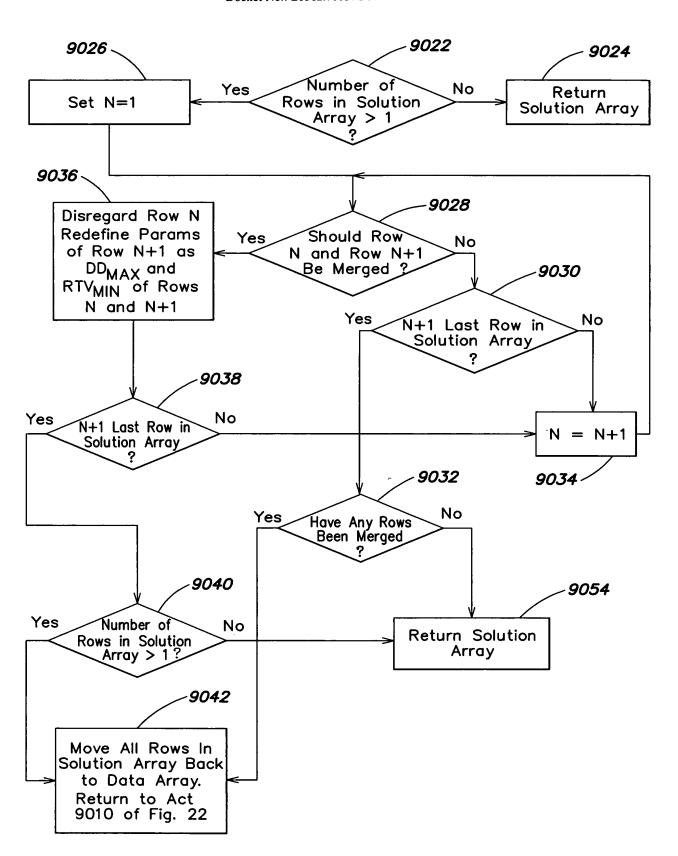


FIG. 23

GOUNALIS, Anthony J.

Serial No.: 10/675,644 Docket No.: L0562.70037US00

|      |      |     |      |      |      | 9051 | 9052 |        |      |
|------|------|-----|------|------|------|------|------|--------|------|
| 9044 | _    | RVT | 200  | 700  | 800  | 2000 | 2868 |        |      |
|      | Data | EDT | 7    | თ    | 11   | 19   | 17   |        |      |
|      |      | MDT | -    | 2    | 2.3  | 3    | 3.05 |        |      |
| 9044 |      |     |      |      |      | 9048 | 9049 | - 9050 |      |
|      |      | RVT | 200  | 700  | 800  | 1000 | 2000 | 2000   | 2868 |
|      | Data | EDT | 7    | 6    | 11   | 3.5  | 19   | 19     | 17   |
|      |      | TOM | L    | 2    | 2.3  | 0.5  | 3    | 3      | 3.05 |
| 9044 |      |     |      | `    |      |      |      |        |      |
|      |      | RVT | 2868 | 2000 | 2000 | 500  | 700  | 800    | 1000 |
|      | Data | EDT | 17   | 19   | 19   | 7    | б    | 11     | 3.5  |
|      |      | MDT | 3.05 | 2    | 3    | -    | 2    | 2.3    | 0.5  |

FIG. 24B

GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

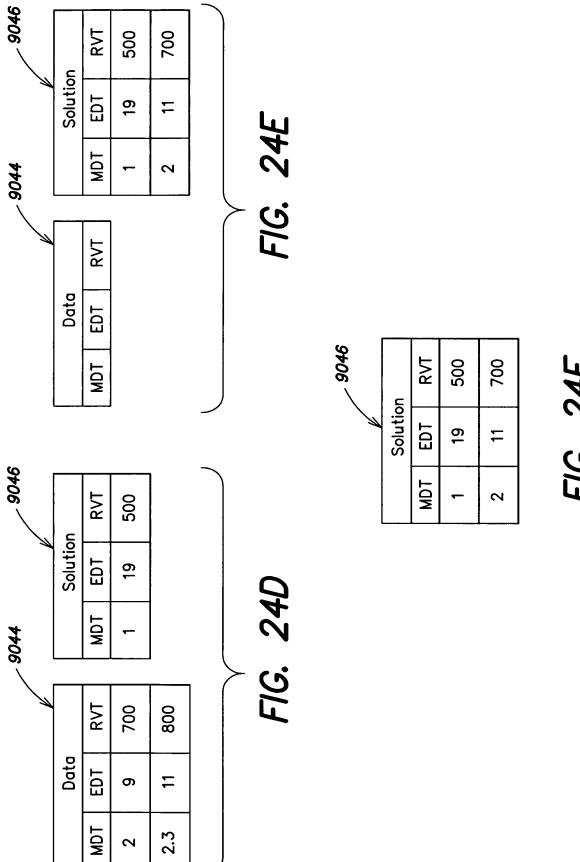


FIG. 24F

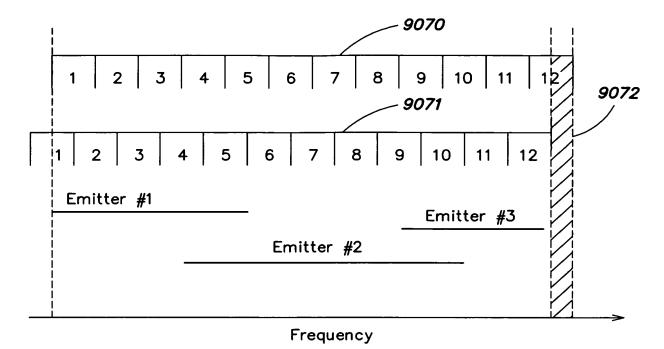


FIG. 25

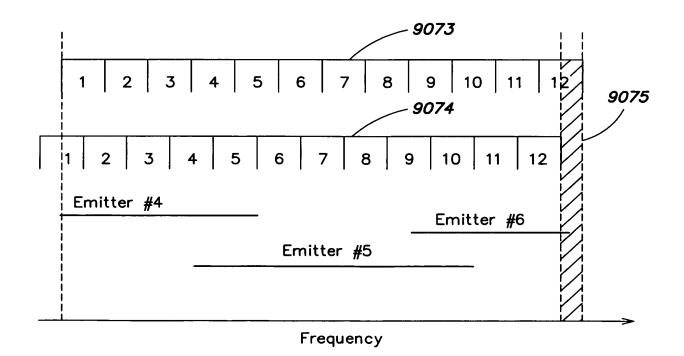


FIG. 26

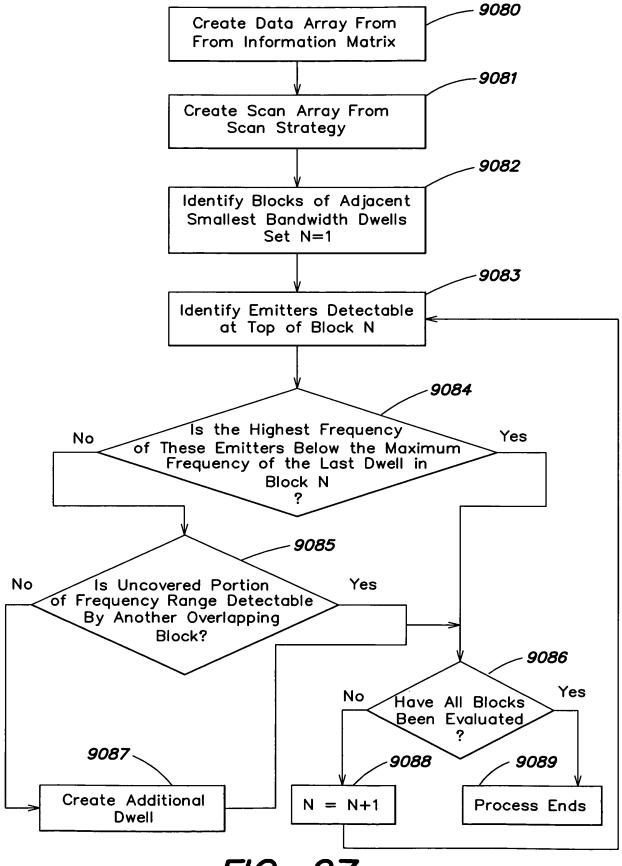
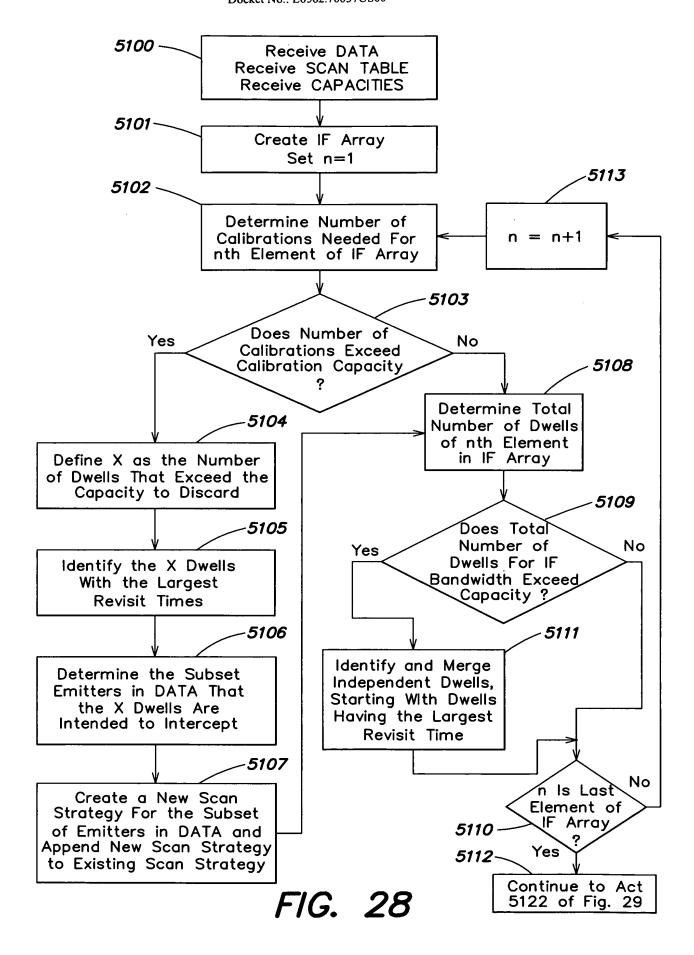


FIG. 27



GOUNALIS, Anthony J. Serial No.: 10/675,644 Docket No.: L0562.70037US00

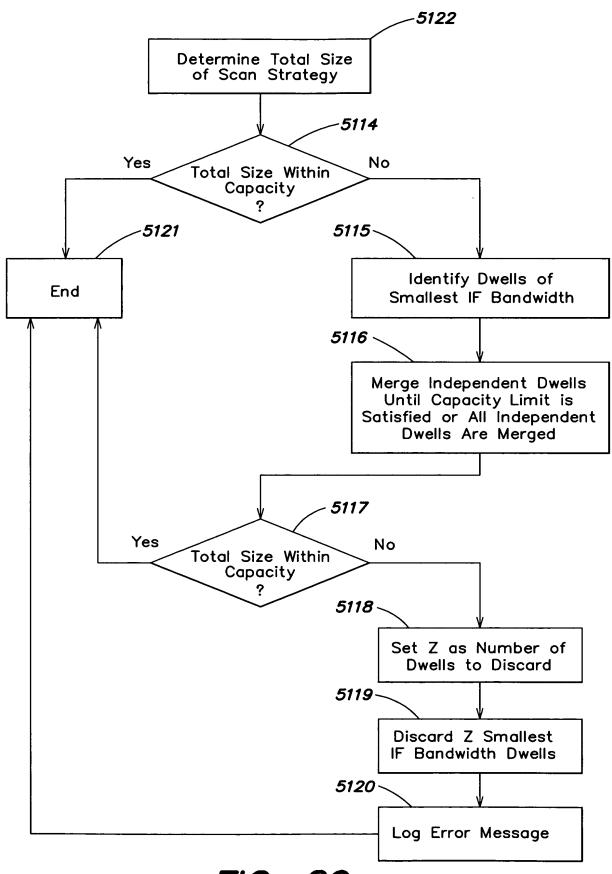
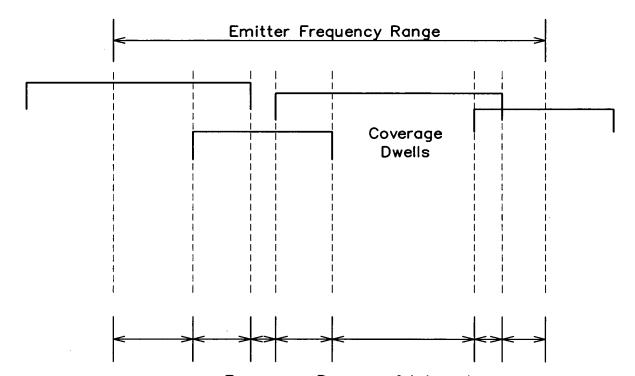


FIG. 29



Frequency Ranges of Interest

FIG. 30

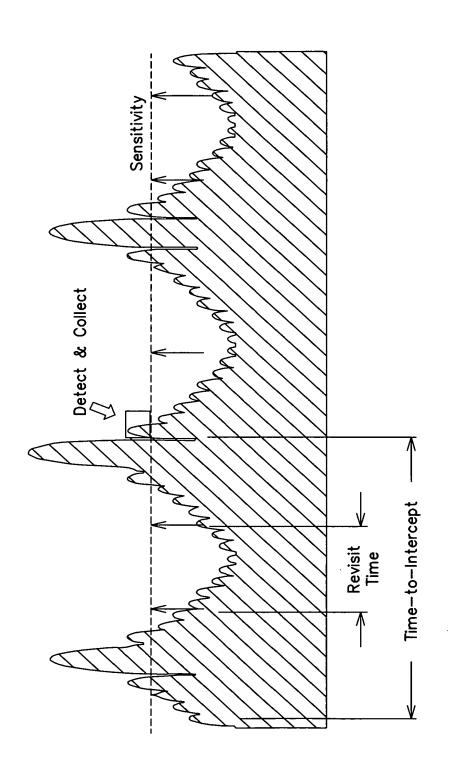


FIG. 31

Docket No.: L0562.70037US00

